

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~.

The status of each claim is indicated according to **37 CFR 1.173**.

Please AMEND the claims as follows:

1. – 66. (cancelled)

67. (five times amended) An apparatus, comprising:

a virus scanner adapted to scan a file stored in a storage device for infection with a virus;

a quarantining device adapted to quarantine the file from non-infected files on the storage device, when the file is infected; and

a converting device adapted to prohibit use of the infected file based upon executing an encoding process for security that converts the infected file into encoded data,

thereby the infected file is deleted and the encoded data is stored in another storage area different from a storage area in which the infected file was stored.

68.- 74. (cancelled)

75. (five times amended) An apparatus comprising:

a storage device adapted to store a plurality of files and a status for each of the files indicating whether each of the files is infected with a virus;

a virus checking device adapted to select a file to be checked for infection with a virus;

a quarantining device adapted to quarantine an infected file on the storage device; and

a converting device adapted to prohibit use of the infected file based upon executing an encoding process for security that converts the infected file into encoded data,

thereby the infected file is deleted and the encoded data is stored in another storage area different from a storage area in which the infected file was stored.

76. - 78. (cancelled)

79. (five times amended) An apparatus, comprising:

a storage device adapted to store a plurality of files and a status for each of the files indicating whether each of the files is infected with a virus;

a virus checking device adapted for selection of a file to be checked for infection with a virus; and

a converting device adapted to prohibit use of an infected file based upon executing an encoding process for security that converts the infected file into encoded data,

thereby the infected file is deleted and the encoded data is stored in another storage area different from a storage area in which the infected file was stored.

80.-83. (cancelled)

84. (five times amended) A method, comprising:
scanning a file for infection with a virus using a computer;
quarantining the file from non-infected files if the file is infected with a virus; and
prohibiting use of the infected file by executing an encoding process for security that converts the infected file into encoded data,

thereby the infected file is deleted and the encoded data is stored in another storage area different from a storage area in which the infected file was stored.

85.- 93. (cancelled)

94. (five times amended) A computer readable storage medium controlling a computer by:

scanning a file for infection with a virus;
quarantining the file if infected with a virus; and
prohibiting use of the infected file by executing an encoding process for security that converts the infected file into encoded data,

thereby the infected file is deleted and the encoded data is stored in another storage area different from a storage area in which the infected file was stored.

95.-108. (cancelled)

109. (five times amended) A method comprising:
scanning a file for infection with a virus using a computer;

isolating the file from non-infected files, if the file is infected with a virus; and prohibiting use of the infected file via executing an encoding process for security that converts the infected file into encoded data,

thereby the infected file is deleted and the encoded data is stored in another storage area different from a storage area in which the infected file was stored.

110. - 144. (cancelled)

145. (twice amended) A method for performing an anti-virus operation, the method comprising:

detecting a virus-infected file in a storage device using a computer;

prohibiting use of the virus-infected file based upon converting for security the virus-infected file into encoded data; and

storing the encoded data of the virus-infected file,

thereby the virus-infected file is deleted and the encoded data is stored in another storage area different from a storage area in which the virus-infected file was stored.

146. (previously presented) The method according to claim 145 further comprising: executing inverse conversion of said encoded data for restoring the virus-infected file.

147. (previously presented) The method according to claim 145 further comprising: registering virus information of the virus-infected file in an infection management table.

148. (previously presented) The method according to claim 147 further comprising: outputting the virus information for a virus analysis.

149. (previously presented) The method according to claim 145 wherein an operation of said detecting is activated periodically or activated in response to a command instruction.

150. (previously presented) The method according to claim 145 wherein the encoded data is stored in a different storage area from a storage area in which the virus-infected file was stored.

151. (previously presented) The method according to claim 145 wherein the encoded

data is stored in a storage area which cannot be accessed readily.

152. (previously presented) The method according to claim 147, further comprising:
deleting the virus information of the virus-infected file registered in the infection
management table through an interactive process.

153. (previously presented) The method according to claim 147 wherein the virus
information contains a virus name and a storage location in which the virus-infected file was stored.

154. (amended) A method for performing an anti-virus operation, the method comprising:
detecting a virus-infected file using a computer;
prohibiting use of the virus-infected file by encoding the virus-infected file for security; and
storing the encoded virus infected file,
thereby the virus-infected file is deleted and the encoded data is stored in another storage
area different from a storage area in which the virus-infected file was stored.

155. (amended) A method for performing an anti-virus operation, the method comprising:
detecting a virus-infected file in a storage device using a computer;
converting for security the virus-infected file into encoded data; and
storing the encoded data of the virus infected file,
thereby the virus-infected file is deleted and the encoded data is stored in another storage
area different from a storage area in which the virus-infected file was stored and the converting into
the encoded data prohibits use of the virus-infected file.

156. (previously presented) The method according to claim 155, wherein the use
comprises executing.